

LANCE R. LEFLEUR
DIRECTOR



ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

MAY 22. 2012

Frank Eskridge, General Manager
Water Works & Sewer Board of the City of Gadsden
Post Office Box 800
Gadsden, AL 35901

RE: Final Permit
NPDES Permit No. AL0053201
Gadsden West River WWTP
Etowah County, Alabama

Dear Mr. Owens:

Attached is the issued copy of the above referenced permit. Please note the permit limitations and conditions with which the permittee must comply.

Future monitoring data should be submitted in accordance with the conditions of your permit. Please see PART I.C for your reporting requirements. To reduce the paperwork burden for both the Department and the Permittee, when submitting the required Discharge Monitoring Reports (DMRs), please **do not submit** lab worksheets, logs, reports or other paperwork not specifically required by the permit unless requested by ADEM staff.

Our records indicate that you are currently utilizing the Department's web-based electronic environmental (E2) reporting system for submittal of discharge monitoring reports (DMRs). Your E2 DMRs should automatically update to correspond with the attached permit upon the effective date of the permit.

If you have questions regarding this permit or monitoring requirements, please contact Nicholas Caraway by email at ncaraway@adem.state.al.us or by phone at (334) 274 - 4220.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Ramsey", is written over a horizontal line.

Scott Ramsey, Chief
Municipal Section
Water Division

Enclosure: Final Permit

cc: Mr. Mark Nuhfer/Environmental Protection Agency
Ms. Elaine Snyder/U.S. Fish and Wildlife Services
Mr. Marion Bertolotti/ADEM
Mr. Mike McCary/Permits & Services

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S. W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)



Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
4171 Commanders Drive
Mobile, AL 36615-1421
(251) 432-6533
(251) 432-6598 (FAX)



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FEB - 6 2012

Jack Davis, Superintendent
The Water Works and Sewer Board of the City of Gadsden
Post Office Box 800
Gadsden, Alabama 35902

RE: Response to Draft Permit Comments
NPDES Permit No. AL0053201
Gadsden West River WWTP
Etowah County

Dear Mr. Davis:

The following is provided in response to your comments dated October 19, 2011, regarding the draft permit for Gadsden West River WWTP.

Comment 1: "On Page 4 of 27 the E. Coli Monthly Average is stated to be Arithmetic Average. Change to Geometric Mean for the Monthly Average as specified per ADEM regulations 335-6-10-.09(5)(e) 7. Bacteria (i) & (ii)."

Response 1: In accordance with ADEM 335-6-10-.09-(5)(e) 7, the geometric mean can be used but shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. The permit requires that testing be done two times per week so the permit will be changed to include the limitation as a geometric mean.

Comment 2: "On Page 4 of 27 the Percent Removal is 85% for Total Suspended Solids, we request the 65% removal as allowed by the ADEM regulation 335-6-10-.08 Waste Treatment Requirements."

Response 2: It is stated in 40 CFR 133.101 (g) *Facilities eligible for treatment equivalent to secondary treatment* that treatment works shall be eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment (§133.105), if:

- (1) The BOD₅ and SS effluent concentrations consistently achievable through proper operation and maintenance (§133.101(f)) of the treatment works exceed the minimum level of the effluent quality set forth in §§133.102(a) and 133.102(b),
- (2) A trickling filter or waste stabilization pond is used as the principal process, and
- (3) The treatment works provide significant biological treatment of municipal wastewater.

After reviewing the TSS data submitted by the facility each month, it is determined that the facility is able to consistently achieve the monthly average limit of 30.0 mg/L in which the facility is not eligible for

treatment equivalent to secondary treatment due to factor (1) listed above. The monthly average percent removal of 85% will remain unchanged in the permit.

Comment 3: "Bottom of Page 4 of 27, under (TP), 2nd line "From January 1, 2014 through February 28, 2014", should read "From January 1, 2014 through March 1, 2015", correct?"

Response 3: Consistent with the Total Phosphorus Compliance Schedule submitted by the facility, it should read From January 1, 2014 through February 28, 2015 with the Permittee coming into compliance with the 1.0 mg/L limit March 1, 2015. The permit has been corrected. Also, please be aware of other TP schedule requirements listed in Part I.E.2.

Comment 4: "Under NPDES Permit Rationale on page 2, make changes as requested in items 1 & 2 above (Geometric Mean & 85% to 65%)."

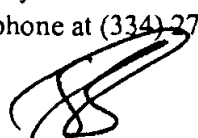
Response 4: The aforementioned requests were addressed as noted above in Responses 1 and 2.

Comment 5: "Under Toxicity and Disinfection Rationale on page 2/2, the chronic toxicity testing is based on Instream Waste Concentration (IWC) and is calculated as 1.42%. If the IWC is to be based on the combined flow of all three design flows the calculated IWC would be 1.75% (see attached sheet). This computation does not include the diffuser which would result in a much lower value at the edge of the mixing zone. We would like to request the change from 7.0% to 1.75% which would change in the NPDES Permit rationale, Toxicity and Disinfection Rationale, and Page 23 of 27 Section B.1.b."

Response 5: The IWC is based on the CORMIX model completed by the Department's Water Quality Branch in 2009. The IWC considers the combined flows of Gadsden West River WWTP (11.32 MGD), Rainbow City Lagoon (3.0 MGD), and Attalla Lagoon (4.0 MGD), a total of 18.32 MGD. Using the combined discharge design flow of 18.32 MGD, the chronic mixing zone IWC is 7.0% (rounded up from the 6.2% calculated IWC). The IWC will remain unchanged in the permit.

The Department appreciates your careful review of the draft permit and the comments submitted. The changes noted above have been made and the Department intends to proceed with the permitting process.

If you have further any questions or comments regarding this matter, please contact Nicholas Caraway by phone at (334) 274 - 4220 or by email at ncaraway@adem.state.al.us.



Scott Ramsey, Chief
Municipal Section
Water Division

Enclosure: Draft Permit

LANCE R. LEFLEUR
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MAR 12 2012

Jack Davis, Superintendent
The Water Works and Sewer Board of the City of Gadsden
Post Office Box 800
Gadsden, Alabama 35902

RE: Response to Draft Permit Comments
NPDES Permit No. AL0053201
Gadsden West River WWTP
Etowah County

Dear Mr. Davis:

The following is provided in response to your comments dated February 15, 2012, regarding the draft permit for Gadsden West River WWTP.

Comment 1: "Item 2 of our initial request was to change the 85% Removal for Total Suspended Solids (TSS) to 65%. We would like to request your re-evaluation of the position ADEM indicated regarding this item in your correspondence of February 6, 2012."

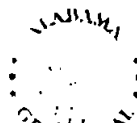
Response 1: Per 40 CFR Part 133.103, the TSS monthly average limitation will be lowered to 24 mg/L and the percent removal will be removed altogether since the treatment works will be meeting a more stringent limitation than the required secondary treatment limitation of 30 mg/L, which requires a minimum percent removal of 85%. Per our discussion through email, the Department is going to lower the TSS monthly average limitation to 24 mg/L and remove the TSS percent removal.

The Department appreciates your careful review of the draft permit and the comments submitted. The changes noted above have been made and the Department intends to proceed with the permitting process.

If you have further any questions or comments regarding this matter, please contact Nicholas Caraway by phone at (334) 274 - 4220 or by email at ncaraway@adem.state.al.us.

A handwritten signature in black ink, appearing to read "Scott Ramsey", is written over a horizontal line.

Scott Ramsey, Chief
Municipal Section
Water Division





NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: GADSDEN WATER WORKS AND SEWER BOARD
POST OFFICE BOX 800
GADSDEN, ALABAMA 35902

FACILITY LOCATION: GADSDEN WEST RIVER WWTP (11.32 MGD)
2000 WILLS CREEK RD
GADSDEN, ALABAMA
ETOWAH COUNTY

PERMIT NUMBER: AL0053201

RECEIVING WATERS: COOSA RIVER (NEELY HENRY LAKE)
BIG WILLS CREEK (STORMWATER)

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

ISSUANCE DATE: MAY 22, 2012

EFFECTIVE DATE: JUNE 1, 2012

EXPIRATION DATE: MAY 31, 2017

GENNA L. DEAN

Alabama Department of Environmental Management

**MUNICIPAL SECTION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT**

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PART I**DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS****A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS****1. Outfall 0011 Discharge Limits**

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

| <u>Parameter</u> | <u>Discharge Limitations*</u> | | | | | | | <u>Monitoring Requirements**</u> | | | |
|---|-------------------------------|-----------------------|------------------------|-----------------------|----------------------|----------------------|------------------------|----------------------------------|------------------------|----------------------------------|---------------------|
| | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Daily Minimum</u> | <u>Daily Maximum</u> | <u>Percent Removal</u> | <u>(1) Sample Location</u> | <u>(2) Sample Type</u> | <u>(3) Measurement Frequency</u> | <u>(4) Seasonal</u> |
| Oxygen, Dissolved (DO) 00300 I 0 0 | ***** | ***** | ***** | ***** | 3.0 mg/l | ***** | ***** | E | GRAB | D | ***** |
| pH 00400 I 0 0 | ***** | ***** | ***** | ***** | 6.0 S.U. | 8.5 S.U. | ***** | E | GRAB | D | ***** |
| Solids, Total Suspended 00530 I 0 0 | 2265 lbs/day | 3398 lbs/day | 24.0 mg/l | 36.0 mg/l | ***** | ***** | ***** | E | COMP24 | D | ***** |
| Solids, Total Suspended 00530 G 0 0 | REPORT lbs/day | REPORT lbs/day | REPORT mg/l | REPORT mg/l | ***** | ***** | ***** | I | COMP24 | D | ***** |
| Nitrogen, Ammonia Total (As N) 00610 I 0 0 | 1888 lbs/day | 2832 lbs/day | 20.0 mg/l | 30.0 mg/l | ***** | ***** | ***** | E | COMP24 | D | ***** |
| Nitrogen, Kjeldahl Total (As N) 00625 I 0 0 | 2832 lbs/day | 4248 lbs/day | 30.0 mg/l | 45.0 mg/l | ***** | ***** | ***** | E | COMP24 | D | ***** |
| Nitrite Plus Nitrate Total I Det. (As N) 00630 I 0 0 | REPORT lbs/day | REPORT lbs/day | REPORT mg/l | REPORT mg/l | ***** | ***** | ***** | E | COMP24 | G | ***** |
| Phosphorus, Total (As P) 00665 I 0 0 | REPORT lbs/day | REPORT lbs/day | See Note (TP) | REPORT mg/l | ***** | ***** | ***** | E | COMP24 | G | S |
| Phosphorus, Total (As P) 00665 I 0 0 | REPORT lbs/day | REPORT lbs/day | REPORT mg/l | REPORT mg/l | ***** | ***** | ***** | E | COMP24 | G | W |
| Flow, In Conduit or Thru Treatment Plant 50050 I 0 0 | REPORT MGD | ***** | ***** | ***** | ***** | REPORT MGD | ***** | E | CONTIN | A | ***** |
| Chlorine, Total Residual See note (5) 50060 I 0 0 | ***** | ***** | 0.775 mg/l | ***** | ***** | 1.0 mg/l | ***** | E | GRAB | D | ***** |
| E. Coli 51040 I 0 0 | ***** | ***** | 126 (6) col/100mL | ***** | ***** | 487 col/100mL | ***** | E | GRAB | D | ECS |
| E. Coli 51040 I 0 0 | ***** | ***** | 548 (6) col/100mL | ***** | ***** | 2507 col/100mL | ***** | E | GRAB | D | ECW |
| BOD, Carbonaceous 05 Day, 20C 80082 I 0 0 | 1888 lbs/day | 2832 lbs/day | 20.0 mg/l | 30.0 mg/l | ***** | ***** | ***** | E | COMP24 | D | ***** |
| BOD, Carbonaceous 05 Day, 20C 80082 G 0 0 | REPORT lbs/day | REPORT lbs/day | REPORT mg/l | REPORT mg/l | ***** | ***** | ***** | I | COMP24 | D | ***** |

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

K – Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS – Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (April – October)

W = Winter (November - March)

ECS = E. coli Summer (June – September)

ECW = E. coli Winter (October – May)

(TP) From the Permit effective date through December 31, 2013 – Growing season monthly average limit = 2.7 mg/L

From January 1, 2014 through February 28, 2015 – Growing season monthly average limit = 1.75 mg/L

From March 1, 2015 forward – Growing season monthly average limit = 1.0 mg/L

See Part I.E.2 for all schedule requirements

(5) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter "NODI=9" on the monthly DMR.

(6) Geometric Mean can be used with a minimum of 5 samples collected over a 30-day period.

2. Outfall 001T Discharge Limits

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001T, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

| <u>Parameter</u> | <u>Discharge Limitations*</u> | | | | | | | <u>Monitoring Requirements**</u> | | | |
|--|-------------------------------|-----------------------|------------------------|-----------------------|----------------------|----------------------|------------------------|----------------------------------|------------------------|----------------------------------|---------------------|
| | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Daily Minimum</u> | <u>Daily Maximum</u> | <u>Percent Removal</u> | <u>(1) Sample Location</u> | <u>(2) Sample Type</u> | <u>(3) Measurement Frequency</u> | <u>(4) Seasonal</u> |
| Toxicity, Ceriodaphnia Chronic 61426 1 00 | ***** | Pass = 0 Fail = 1 | ***** | ***** | ***** | ***** | ***** | E | COMP24 | Q | ***** |
| Toxicity, Pimephales Chronic 61428 1 00 | ***** | Pass = 0 Fail = 1 | ***** | ***** | ***** | ***** | ***** | E | COMP24 | Q | ***** |

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

3. Outfall 002S Discharge Limits - Stormwater

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 002S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

| <u>Parameter</u> | <u>Discharge Limitations*</u> | | | | | | | <u>Monitoring Requirements**</u> | | | |
|---|-------------------------------|-----------------------|------------------------|-----------------------|----------------------|----------------------|------------------------|----------------------------------|----------------------------|----------------------------------|---------------------|
| | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Daily Minimum</u> | <u>Daily Maximum</u> | <u>Percent Removal</u> | <u>(1) Sample Location</u> | <u>(2) (5) Sample Type</u> | <u>(3) Measurement Frequency</u> | <u>(4) Seasonal</u> |
| pH 00400 1 0 0 | ***** | ***** | ***** | ***** | REPORT S.U. | REPORT S.U. | ***** | E | GRAB | J | ***** |
| Solids, Total Suspended 00530 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT mg/l | ***** | E | GRAB | J | ***** |
| Oil & Grease 00556 1 0 0 | ***** | ***** | ***** | ***** | ***** | 15 mg/l | ***** | E | GRAB | J | ***** |
| Nitrogen, Ammonia Total (As N) 00610 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT mg/l | ***** | E | GRAB | J | ***** |
| Nitrogen, Kjeldahl Total (As N) 00625 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT mg/l | ***** | E | GRAB | J | ***** |
| Nitrite Plus Nitrate Total (As N) 00630 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT mg/l | ***** | E | GRAB | J | ***** |
| Phosphorus, Total (As P) 00665 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT mg/l | ***** | E | GRAB | J | ***** |
| Flow, In Conduit or Thru Treatment Plant 50050 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT MGD | ***** | E | CALCTD | J | ***** |
| E. Coli 51040 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT col/100mL | ***** | E | GRAB | J | ***** |
| BOD, Carbonaceous 05 Day, 20C 80082 1 0 0 | ***** | ***** | ***** | ***** | ***** | REPORT mg/l | ***** | E | GRAB | J | ***** |

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

(5) See Part IV. F. 3

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS**1. Representative Sampling**

Sample collection and measurement actions shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit. The effluent sampling point shall be at the nearest accessible location just prior to discharge and after final treatment, unless otherwise specified in the permit.

2. Measurement Frequency

Measurement frequency requirements found in Provision I.A. shall mean:

- a. Seven days per week shall mean daily.
- b. Five days per week shall mean any five days of discharge during a calendar weekly period of Sunday through Saturday.
- c. Three days per week shall mean any three days of discharge during a calendar week.
- d. Two days per week shall mean any two days of discharge during a calendar week.
- e. One day per week shall mean any day of discharge during a calendar week.
- f. Two days per month shall mean any two days of discharge during the month that are no less than seven days apart. However, if discharges occur only during one seven-day period in a month, then two days per month shall mean any two days of discharge during that seven day period.
- g. One day per month shall mean any day of discharge during the calendar month.
- h. Quarterly shall mean any day of discharge during each calendar quarter.
- i. The Permittee may increase the frequency of sampling, listed in Provisions I.B.2.a through I.B.2.h; however, all sampling results are to be reported to the Department.

3. Test Procedures

For the purpose of reporting and compliance, Permittees shall use one of the following procedures:

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this permit the Permittee shall use the newly approved method.

- b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the Permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

- c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures a and b above shall be reported on the Permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:

- a. The facility name and location, point source number, date, time and exact place of sampling;

- b. The name(s) of person(s) who obtained the samples or measurements;
 - c. The dates and times the analyses were performed;
 - d. The name(s) of the person(s) who performed the analyses;
 - e. The analytical techniques or methods used, including source of method and method number; and
 - f. The results of all required analyses.
5. Records Retention and Production
- a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.
 - b. All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing; and shall be available for inspection.
6. Reduction, Suspension or Termination of Monitoring and/or Reporting
- a. The Director may, with respect to any point source identified in Provision I.A. of this permit, authorize the Permittee to reduce, suspend or terminate the monitoring and/or reporting required by this permit upon the submission of a written request for such reduction, suspension or termination by the Permittee, supported by sufficient data which demonstrates to the satisfaction of the Director that the discharge from such point source will continuously meet the discharge limitations specified in Provision I.A. of this permit.
 - b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this permit until written authorization to reduce, suspend or terminate such monitoring and/or reporting is received by the Permittee from the Director.
7. Monitoring Equipment and Instrumentation
- All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements
- a. The Permittee shall conduct the required monitoring in accordance with the following schedule:
 - (1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.
 - (2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).
 - (3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).
 - (4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter.

Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.

- b. The Permittee shall submit discharge monitoring reports (DMRs) on the forms approved by the Department and in accordance with the following schedule:
- (1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
 - (2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
 - (3) **REPORTS OF SEMIANNUAL TESTING** shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
 - (4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, the first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
- c. The Department is utilizing a web-based electronic environmental (E2) reporting system for submittal of DMRs. The E2 DMR system allows ADEM to electronically validate, acknowledge receipt, and upload data to the state's central wastewater database. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. If the Permittee is not already participating in the E2 DMR system, the Permittee must apply for participation in the E2 DMR system within 180 days of the effective date of this permit unless valid justification as to why they cannot participate is submitted in writing. After 180 days, hard copy DMRs may be used only with written approval from the Department. To participate in the E2 DMR system, the Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes>. If a permittee is allowed to submit via the US Postal Service, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit. If the Permittee, using approved analytical methods as specified in Provision I. B. 2. monitors any discharge from a point source for a substance identified in Provision I. A. of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR Form and the increased frequency shall be indicated on the DMR Form. In the event no discharge from a point source identified in Provision I. A. of this permit and described more fully in the Permittee's application occurs during a monitoring period, the Permittee shall report "No Discharge" for such period on the appropriate DMR Form.
- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:
- "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."**
- e. The Permittee may certify in writing that a discharge will not occur for an extended period of time and after such certification shall not be required to submit monitoring reports. Written notification of a planned resumption of discharge shall be submitted at least 30 days prior to resumption of the discharge. If an unplanned resumption of discharge occurs, written notification shall be submitted within 7 days of the resumption. In any case, all discharges shall comply with all provisions of this permit.
- f. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules, shall be addressed to:

Alabama Department of Environmental Management
Municipal Section, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

**Alabama Department of Environmental Management
Municipal Section, Water Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2059**

DMRs required to be submitted by this permit shall be addressed to:

**Alabama Department of Environmental Management
Environmental Data Section, Permits & Services Division
Post Office Box 301463
Montgomery, Alabama 36130-1463**

- g. If this permit is a reissuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b. above.

2. Noncompliance Notification

- a. The Permittee must notify the Department if, for any reason, the Permittee's discharge:

- (1) Does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I. A. of this permit which is denoted by an "(X)"
- (2) Potentially threatens human health or welfare,
- (3) Threatens fish or aquatic life
- (4) Causes an in-stream water quality criterion to be exceeded;
- (5) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
- (6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
- (7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A as a result of an unanticipated bypass or upset; or
- (8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision)

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects, to the Department within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c, no later than five days after becoming aware of the occurrence of such discharge or occurrence.

- b. If for any reason, the Permittee's discharge does not comply with any limitation of this permit, then the Permittee must submit a written report to the Director or Designee, as provided in Provision I.C.2.c below. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Provision I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.
- c. Form 421 must be submitted to the Director or Designee in accordance with Provisions I.C.2a. or b. The completed form must document the following information:
 - (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If not corrected by the due date of the written report, then the Permittee is to state the anticipated timeframe that is expected to transpire before the noncompliance is resolved; and
 - (3) A description of the steps taken by the Permittee and the steps planned to be taken by the Permittee to reduce or eliminate the noncompliant discharge, including all steps taken to prevent recurrence.
- d. Immediate notification

The permittee shall provide notification to the Director, the public, the county health department, and any other affected entity such as public water systems, as soon as possible upon becoming aware of any notifiable sanitary sewer overflow. The Permittee shall also report notification of the noncompliance event to any other affected entity such as the public.

- e. The Permittee shall keep an updated record of all known wastewater discharge points that are not authorized as permitted outfalls, including but not limited to SSOs. The Permittee shall submit annual Municipal Water Pollution Prevention Plan (MWPP) reports to the Department each year by May 31st for the prior calendar year period beginning January 1st and ending December 31st. The Annual MWPP Reports shall contain a list of all known wastewater discharge points that are not authorized as permitted outfalls and any discharges that occur prior to the headworks of the wastewater treatment plant covered by this permit. The MWPP shall also provide a list of any discharges reported in accordance with Provision I.C.2.a. The Permittee shall submit with its Annual MWPP Report the following information for each known unpermitted discharge that occurs:
 - (1) The cause of the discharge;
 - (2) Date, duration and volume of discharge (estimate if unknown);
 - (3) Description of the source (e.g., manhole, lift station);
 - (4) Location of the discharge, by street address or any other appropriate method;
 - (5) The ultimate destination of the flow (e.g., surface waterbody, municipal separate storm sewer to surface waterbody). Location should be shown on a USGS quad sheet or copy thereof; and
 - (6) Corrective actions or plans to eliminate future discharges.
- f. The Permittee shall report SSO and other illicit or anomalous discharge events on Form 415 in accordance with Part I.C.2.a. This form is available on the ADEM web page or upon request from the Permittee.

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

The Permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

2. Termination of Discharge

The Permittee shall notify the Director, in writing, when all discharges from any point source(s) identified in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

3. Updating Information

- a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the Permittee shall furnish the Director with an update of any information provided in the permit application.
- b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

E. SCHEDULE OF COMPLIANCE

1. Compliance with discharge limits

The Permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. Compliance with Total Phosphorus limits (Note: Growing season is April – October)

The Permittee shall achieve compliance with the discharge limitations for Total Phosphorus (TP) specified in Provision I.A. according to the following schedule:

| | |
|--|---|
| December 1, 2011 December 1, 2012 December 1, 2013 | Submit report describing the Permittee's progress towards achieving compliance with TP limit of 1.0 mg/L. The report should include a discussion of the projects completed to date and a schedule for any projects that remain to be completed. The following should be included in the report, where applicable: pollution abatement program and preliminary plans; final plans, specifications, and drawings; date(s) of initiation of construction; and date(s) of attainment of operational status. |
| January 1, 2014 | Achieve compliance with TP limit of 1.75 mg/L (growing season monthly avg) |
| December 1, 2014 | Submit report describing the Permittee's progress towards achieving compliance with TP limit of 1.0 mg/L. The report should include a discussion of the projects completed to date and a schedule for any projects that remain to be completed. The following should be included in the report, where applicable: pollution abatement program and preliminary plans; final plans, specifications, and drawings; date(s) of initiation of construction; and date(s) of attainment of operational status. |
| March 1, 2015 | Achieve compliance with TP limit of 1.0 mg/L (growing season monthly) |

3. Schedule

No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit.

2. Best Management Practices (BMP)

- a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.
- b. The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.
- c. The Permittee shall prepare, submit for approval and implement a BMP Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Certified Operator

The Permittee shall not operate any wastewater treatment plant unless the competency of the operator to operate such plant has been duly certified by the Director pursuant to AWPCA, and meets the requirements specified in ADEM Administrative Code, Rule 335-10-1.

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

The Permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. Right of Entry and Inspection

The Permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:

- (1) Enter upon the Permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;
- (3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
- (4) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:
 - (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;
 - (2) It enters the same receiving stream as the permitted outfall; and
 - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.
- c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:

- (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
 - (3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the Permittee is granted such authorization, and the Permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.
- d. The Permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.

2. Upset

- a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:
 - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and
 - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that:
 - (i) An upset occurred;
 - (ii) The Permittee can identify the specific cause(s) of the upset;
 - (iii) The Permittee's facility was being properly operated at the time of the upset; and
 - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.
- b. The Permittee has the burden of establishing that each of the conditions of Provision II C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES

1. Duty to Comply

- a. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
- b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a Permittee in an enforcement action.
- c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
- d. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.
- e. Nothing in this permit shall be construed to preclude or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications, or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.

2. Removed Substances

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.

3. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge

limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the Permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. Compliance With Statutes and Rules

- a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059.
- b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE

1. Duty to Reapply or Notify of Intent to Cease Discharge

- a. If the Permittee intends to continue to discharge beyond the expiration date of this permit, the Permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the Permittee does not intend to continue discharge beyond the expiration of this permit, the Permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.
- b. Failure of the Permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

Prior to any facility expansion, process modification or any significant change in the method of operation of the Permittee's treatment works, the Permittee shall provide the Director with information concerning the planned expansion, modification or change. The Permittee shall apply for a permit modification at least 180 days prior to any facility expansion, process modification, any significant change in the method of operation of the Permittee's treatment works or other actions that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant or could result in an additional discharge point. This condition applies to pollutants that are or that are not subject to discharge limitations in this permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.

3. Transfer of Permit

This permit may not be transferred or the name of the Permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new Permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the Permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership or control of the Permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. Permit Modification and Revocation

- a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;
 - (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or
 - (3) If modification or revocation and reissuance is requested by the Permittee and cause exists, the Director may grant the request.
- b. This permit may be modified during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

- (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
- (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;
- (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;
- (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;
- (8) To agree with a granted variance under 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
- (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
- (10) When required by the reopener conditions in this permit;
- (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
- (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
- (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or
- (14) When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

5. Termination

This permit may be terminated during its term for cause, including but not limited to, the following:

- a. Violation of any term or condition of this permit;
- b. The Permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the Permittee's misrepresentation of any relevant facts at any time;
- c. Materially false or inaccurate statements or information in the permit application or the permit;
- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- e. The Permittee's discharge threatens human life or welfare or the maintenance of water quality standards;
- f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;
- g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the Permittee; or
- h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. Suspension

This permit may be suspended during its term for noncompliance until the Permittee has taken action(s) necessary to achieve compliance.

7. Stay

The filing of a request by the Permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term or condition.

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the Permittee, and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition, and the Permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the Permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

1. The Permittee shall not allow the introduction of wastewater, other than domestic wastewater, from a new direct discharger prior to approval and permitting, if applicable, of the discharge by the Department.
2. The Permittee shall not allow an existing indirect discharger to increase the quantity or change the character of its wastewater, other than domestic wastewater, prior to approval and permitting, if applicable, of the increased discharge by the Department.
3. The Permittee shall report to the Department any adverse impact caused or believed to be caused by an indirect discharger on the treatment process, quality of discharged water, or quality of sludge. Such report shall be submitted within seven days of the Permittee becoming aware of the adverse impacts.

H. PROHIBITIONS

The Permittee shall not allow, and shall take effective enforcement action to prevent and terminate, the introduction of any of the following into its treatment works by industrial users:

1. Pollutants which create a fire or explosion hazard in the treatment works;
2. Pollutants which will cause corrosive structural damage to the treatment works, or dischargers with a pH lower than 5.0 s.u., unless the works are specifically designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts which will cause obstruction of flow in sewers, or other interference with the treatment works;
4. Pollutants, including oxygen demanding pollutants, released in a discharge of such volume or strength as to cause interference in the treatment works;
5. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference or in such quantities that the temperature of the treatment plant influent exceeds 40°C (104° F) unless the treatment plant is designed to accommodate such heat; and
6. Pollutants in amounts which exceed any applicable pretreatment standard under Section 307 of FWPCA or any approved revisions thereof.

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2. False Statements

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

3. Permit Enforcement

- a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA, and as such, any terms, conditions, or limitations of the permit are enforceable under state and federal law.
- b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes:
 - (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;
 - (2) An action for damages;
 - (3) An action for injunctive relief; or
 - (4) An action for penalties.
- c. If the Permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the Permittee has made a timely and complete application for reissuance of the permit:
 - (1) Initiate enforcement action based upon the permit which has been continued;
 - (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
 - (3) Reissue the new permit with appropriate conditions; or
 - (4) Take other actions authorized by these rules and AWPCA.

4. Relief from Liability

Except as provided in Provision II. C. 1. (Bypass) and Provision II. C. 2. (Upset), nothing in this permit shall be construed to relieve the Permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities or penalties to which the Permittee is or may be subject under Section 311 of the FWPCA, 33 U.S.C. Section 1321.

C. PROPERTY AND OTHER RIGHTS

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, state, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.

D. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.
2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.
3. Construction has begun when the owner or operator has:
 - a. Begun, or caused to begin as part of a continuous on-site construction program:
 - (1) Any placement, assembly, or installation of facilities or equipment; or
 - (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which are necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - b. Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.
4. Final plans and specifications for a waste treatment facility at a new source or new discharger, or a modification to an existing waste treatment facility must be submitted to and examined by the Department prior to initiating construction of such treatment facility by the Permittee.
5. Upon completion of construction of waste treatment facilities and prior to operation of such facilities, the Permittee shall submit to the Department a certification from a registered professional engineer, licensed to practice in the State of Alabama, that the treatment facilities have been built according to plans and specifications submitted to and examined by the Department.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. On the basis of the Permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.
2. Compliance with permit terms and conditions notwithstanding, if the Permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the Permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.
3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification, and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

G. GROUNDWATER

Unless specifically authorized by a permit issued by the Department, the discharge of pollutants to groundwater is prohibited. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.

H. DEFINITIONS

1. Average monthly discharge limitation – means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. Average weekly discharge limitation - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

3. Arithmetic Mean – means the summation of the individual values of any set of values divided by the number of individual values.
4. AWPCA – means the Alabama Water Pollution Control Act.
5. BOD – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. Bypass – means the intentional diversion of waste streams from any portion of a treatment facility.
7. CBOD – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. Daily discharge – means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. Daily maximum – means the highest value of any individual sample result obtained during a day.
10. Daily minimum – means the lowest value of any individual sample result obtained during a day.
11. Day – means any consecutive 24-hour period.
12. Department – means the Alabama Department of Environmental Management.
13. Director – means the Director of the Department.
14. Discharge – means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).
15. Discharge Monitoring Report (DMR) – means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. DO – means dissolved oxygen.
17. 8HC – means 8-hour composite sample, including any of the following:
 - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 1 hour over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
 - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. EPA – means the United States Environmental Protection Agency.
19. FC – means the pollutant parameter fecal coliform.
20. Flow – means the total volume of discharge in a 24-hour period.
21. FWPCA – means the Federal Water Pollution Control Act.
22. Geometric Mean – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
23. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
25. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. MGD – means million gallons per day.
27. Monthly Average – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.
28. New Discharger – means a person, owning or operating any building, structure, facility or installation:
 - a. From which there is or may be a discharge of pollutants;
 - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and

- c. Which has never received a final effective NPDES permit for dischargers at that site.
- 29. NH₃-N – means the pollutant parameter ammonia, measured as nitrogen.
- 30. Notifiable sanitary sewer overflow – means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
 - a. Reaches a surface water of the State; or
 - b. May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
- 31. Permit application – means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.
- 32. Point source – means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
- 33. Pollutant – includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
- 34. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
- 35. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
- 36. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".
- 37. Severe property damage – means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 38. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
- 39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
- 40. TON – means the pollutant parameter Total Organic Nitrogen.
- 41. TRC – means Total Residual Chlorine.
- 42. TSS – means the pollutant parameter Total Suspended Solids.
- 43. 24HC – means 24-hour composite sample, including any of the following:
 - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
 - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
 - c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
- 44. Upset – means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- 45. Waters – means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground, or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 33 U.S.C. Section 1362(7), which are within the State of Alabama.

- 46. Week – means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
- 47. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

I. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. SLUDGE MANAGEMENT PRACTICES

1. Applicability
 - a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.
 - b. Provisions of Provision IV.A. do not apply to:
 - (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.
 - (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.
2. Submitting Information
 - a. If applicable, the Permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:
 - (1) Type of sludge stabilization/digestion method;
 - (2) Daily or annual sludge production (dry weight basis);
 - (3) Ultimate sludge disposal practice(s).
 - b. The Permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.
 - c. The Permittee shall give prior notice to the Director of at least 30 days of any change planned in the Permittee's sludge disposal practices.
3. Reopener or Modification
 - a. Upon review of information provided by the Permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.
 - b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit. This permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The Permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR CHRONIC TOXICITY

1. Chronic Toxicity Test
 - a. The permittee shall perform short-term chronic toxicity tests on the wastewater at Outfall 0011.
 - b. The samples shall be diluted using appropriate control water to the Instream Waste Concentration (IWC) which is 7.0 percent effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 7-day, 10-year low flow period.
 - c. The samples shall be representative of the combined discharge flow from Gadsden West River (AL0053201), Rainbow City (AL0056839), and Attalla (AL0057657). The samples may be taken after combination of the flows from each facility or prior to combination and flow-weighted based on the actual flow from each facility during the sampling period.
 - d. Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and test samples at the 95% confidence level indicates chronic toxicity and shall constitute noncompliance with this permit.
2. General Test Requirements
 - a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.

- b. Test results shall be deemed unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period for the following:
 - (1) For testing with *P. promelas*, effluent toxicity tests with control survival of less than 80% or if dry weight per surviving control organism is less than 0.25 mg;
 - (2) For testing with *C. dubia*, if the number of young per surviving control organism is less than 15 or if less than 60% of surviving control females produce three broods; or
 - (3) If the other requirements of the EPA Test Procedure are not met.
 - c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are to be reported to the Department along with an explanation of the tests performed and the test results.
 - d. Toxicity tests shall be conducted for the duration of this permit in the month of **August**. Should results from the Annual Toxicity test indicate that Outfall 001-1 exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of FEBRUARY, MAY, AUGUST, and NOVEMBER.
3. Reporting Requirements
 - a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
 - b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in Sections 2 and 6 shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month that tests were performed.
4. Additional Testing Requirements
 - a. If chronic toxicity is indicated (i.e., noncompliance with permit limit), then the Permittee must perform two additional valid chronic toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall run consecutively beginning on the first calendar week following the date that the Permittee became aware of the permit noncompliance. The results of these follow-up tests shall be submitted to the Department no later than 28 days following the month the tests were performed.
 - b. After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols and guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-91-003, EPA/600/R-92/081, EPA/833/B-99/022, and/or EPA/600/6-91/005F).
5. Test Methods

The tests shall be performed in accordance with the latest edition of the "EPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms." The Larval Survival and Growth Test, Method 1000.0, shall be used for the fathead minnow (*Pimephales promelas*) test and the Survival and Reproduction Test, Method 1002.0, shall be used for the cladoceran (*Ceriodaphnia dubia*) test.
6. Effluent Toxicity Testing Reports

The following information shall be submitted with each DMR unless otherwise directed by the Department. The Department may at any times suspend or reinstate this requirement or may decrease or increase the frequency of submittals.

 - a. Introduction
 - (1) Facility name, location and county
 - (2) Permit number
 - (3) Toxicity testing requirements of permit
 - (4) Name of receiving water body
 - (5) Contract laboratory information (if tests are performed under contract)
 - (a) Name of firm
 - (b) Telephone number
 - (c) Address
 - (6) Objective of test

b. Plant Operations

- (1) Discharge Operating schedule (if other than continuous)
- (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection dates (MGD, CFS, GPM)
- (3) Design flow of treatment facility at time of sampling

c. Source of Effluent and Dilution Water

(1) Effluent samples

- (a) Sampling point
- (b) Sample collection dates and times (to include composite sample start and finish times)
- (c) Sample collection method
- (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
- (e) Lapsed time from sample collection to delivery
- (f) Lapsed time from sample collection to test initiation
- (g) Sample temperature when received at the laboratory

(2) Dilution Water

- (a) Source
- (b) Collection/preparation date(s) and time(s)
- (c) Pretreatment (if applicable)
- (d) Physical and chemical characteristics (water temperature, pH, alkalinity, hardness, specific conductance, etc.)

d. Test Conditions

- (1) Toxicity test method utilized
- (2) End point(s) of test
- (3) Deviations from referenced method, if any, and reason(s)
- (4) Date and time test started
- (5) Date and time test terminated
- (6) Type and volume of test chambers
- (7) Volume of solution per chamber
- (8) Number of organisms per test chamber
- (9) Number of replicate test chambers per treatment
- (10) Test temperature, pH, and dissolved oxygen as recommended by the method (to include ranges)
- (11) Specify if aeration was needed
- (12) Feeding frequency, amount, and type of food
- (13) Specify if (and how) pH control measures were implemented
- (14) Light intensity (mean)

e. Test Organisms

- (1) Scientific name
- (2) Life stage and age
- (3) Source
- (4) Disease(s) treatment (if applicable)

f. Quality Assurance

- (1) Reference toxicant utilized and source
- (2) Date and time of most recent chronic reference toxicant test(s), raw data, and current control chart(s). (The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.)
- (3) Dilution water utilized in reference toxicant test
- (4) Results of reference toxicant test(s) (NOEC, IC25, etc.); report concentration-response relationship and evaluate test sensitivity
- (5) Physical and chemical methods utilized

g. Results

- (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
- (2) Provide table of endpoints: NOECs, IC25s, PASS/FAIL, etc. (as required in the applicable NPDES permit)
- (3) Indicate statistical methods used to calculate endpoints
- (4) Provide all physical and chemical data required by method

- (5) Results of test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD) calculated for sublethal endpoints determined by hypothesis testing.

h. Conclusions and Recommendations

- (1) Relationship between test endpoints and permit limits
- (2) Actions to be taken

1/ Adapted from "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, October 2002 (EPA 821-R-02-013), Section 10, Report Preparation.

C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS

1. If chlorine is not utilized for disinfection purposes, TRC monitoring under Part I of this Permit is not required. If TRC monitoring is not required, "NODI = 9" (conditional monitoring) should be reported on the DMR forms.
2. Testing for TRC shall be conducted according to either the amperometric titration method or the DPD colorimetric method as specified in Section 408(C) or (E), Standards Methods for the Examination of Water and Wastewater, 18th edition. If chlorine is not detected prior to actual discharge to the receiving stream using one of these methods (i.e., the analytical result is less than the detection level), the Permittee shall report on the DMR form "NODI = B" or "0". The Permittee shall then be considered to be in compliance with the daily maximum concentration limit for TRC.
3. This permit contains a maximum allowable TRC level in the effluent. The Permittee is responsible for determining the minimum TRC level needed in the chlorine contact chamber to comply with E.coli limits. The effluent shall be dechlorinated if necessary to meet the maximum allowable effluent TRC level.
4. The sample collection point for effluent TRC shall be at a point downstream of the chlorine contact chamber (downstream of dechlorination if applicable). The exact location is to be approved by the Director.

D. PLANT CLASSIFICATION

The Permittee shall report to the Director within 30 days of the effective date of this permit, the name, address and operator number of the certified wastewater operator in responsible charge of the facility. Unless specified elsewhere in this permit, this facility shall be classified in accordance with ADEM Admin. Code R. 335-10-1-.03.

E. POLLUTANT SCANS

The Permittee shall sample and analyze for the pollutants listed in 40 CFR 122 Appendix J Table 2. The Permittee shall provide data from a minimum of three samples collected within the four and one half years prior to submitting a permit application. Samples must be representative of the seasonal variation in the discharge from each outfall.

F. STORM WATER REQUIREMENTS

1. Prohibitions

- a. The Permittee shall not allow the discharge of non-storm water into permitted storm water outfall(s) unless said discharge is already subject to an NPDES permit.
- b. Pollutants removed in the course of treatment or control shall be disposed in a manner that complies with all applicable Department rules and regulations.

2. Operational and Management Practices

The permittee shall prepare and implement a Storm Water Pollution Prevention (SWPP) Plan within one year of the effective date of this permit.

a. In the SWPP Plan, the Permittee shall:

- (1) Assess the treatment plant site by developing and presenting site drainage maps, materials inventory, and best management operational practices. The plan shall also include a description of all spill or leak sources;
- (2) Describe mechanisms and procedures to prevent the contact of sewage sludge, screenings, raw or partially treated wastewater, or any other waste product or pollutant with storm water discharged from the facility;
- (3) Provide for daily inspection on workdays of any structures that function to prevent storm water pollution or that remove pollutants from storm water;
- (4) Provide for daily inspection of the facility in general to ensure that the SWPP Plan is continually implemented and effective;
- (5) Include a Best Management Practices (BMP) Plan that, as a minimum, addresses housekeeping, preventative maintenance, spill prevention and response, and non-storm water discharges;

- (6) Describe mechanisms and procedures to provide sediment control sufficient to prevent or control storm water pollution storm water by particles resulting from soil or sediment migration from the site due to significant clearing, grading, or excavation activities;
 - (7) Designate by position or name the person or persons responsible for the day to day implementation of the SWPP Plan; and
 - (8) Bear the signature of an individual meeting signatory requirements as defined in ADEM Administrative Code, Rule 335-6-6-.09.
- b. The Director or his designee may notify the permittee at any time that the SWPP Plan is deficient and will require correction of the deficiency. The permittee shall correct any SWPP Plan deficiency identified by the Director or his designee within 30 days of receipt of notification and shall certify to the Department that the correction has been made and implemented.
 - c. Administrative Procedures
 - (1) A copy of the SWPP Plan shall be maintained at the facility and shall be available for inspection by the Department.
 - (2) A log of daily inspections required by Provision IV.F.2.a.(3.) of the permit shall be maintained at the facility and shall be made available for inspection by the Department upon request. The log shall contain records of all inspections performed and each daily entry shall be signed by the person performing the inspection.
 - (3) The Permittee shall provide training for any personnel required to implement the SWPP Plan and shall retain documentation of such training at the facility. Training records for all personnel shall be available for inspection by the Department. Training shall be performed prior to the date implementation is required.
3. Monitoring Requirements
- a. Storm water discharged through each storm water outfall shall be sampled once per calendar year, using first flush grab samples (FFGS) collected during the first 30 minutes of discharge.
 - b. The total volume of storm water discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for the storm event(s) sampled. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event must be a minimum of 72 hours. This information must be recorded as part of the sampling procedure and records retained in accordance with Provision I.B.5. of this permit. The volume may be measured using flow measurement devices or may be estimated using any method approved in writing by the Department.

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – INDUSTRIAL AND MUNICIPAL SECTIONS
NONCOMPLIANCE NOTIFICATION FORM**

PERMITTEE NAME: _____ PERMIT NO: _____
FACILITY LOCATION: _____
DMR REPORTING PERIOD: _____

1. DESCRIPTION OF DISCHARGE: (Include outfall number (s))
2. DESCRIPTION OF NON-COMPLIANCE: (Attach additional pages if necessary):

| LIST EFFLUENT VIOLATIONS (If applicable) | | | |
|---|---------------------------------------|--|---|
| Outfall Number (s) | NONCOMPLIANCE PARAMETER(S) | Result Reported (Include units) | Permit Limit (Include units) |
| | | | |
| | | | |
| | | | |
| | | | |

| LIST MONITORING / REPORTING VIOLATIONS (If applicable) | | |
|---|---------------------------------------|---|
| Outfall Number (s) | NONCOMPLIANCE PARAMETER(S) | Monitoring / Reporting Violation (Provide description) |
| | | |
| | | |
| | | |
| | | |

3. CAUSE OF NON-COMPLIANCE (Attach additional pages if necessary):
4. PERIOD OF NONCOMPLIANCE: (Include exact date(s) and time(s) or, if not corrected, the anticipated time the noncompliance is expected to continue):
5. DESCRIPTION OF STEPS TAKEN AND/OR BEING TAKEN TO REDUCE OR ELIMINATE THE NONCOMPLYING DISCHARGE AND TO PREVENT ITS RECURRENCE (attach additional pages if necessary):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

NAME AND TITLE OF RESPONSIBLE OFFICIAL (type or print)

SIGNATURE OF RESPONSIBLE OFFICIAL / DATE SIGNED

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0053201**

Date: September 28, 2011

Revision Date: March 22, 2012

Permit Applicant: Gadsden Waterworks & Sewer Board
Post Office Box 800
Gadsden, Alabama 35901

Location: Gadsden West River WWTP
2000 Wills Creek Rd
Gadsden, Alabama 35902

Draft Permit is: Initial Issuance:
Reissuance due to expiration: X
Modification of existing permit:
Revocation and Reissuance:

| | | |
|------------------------|----------------------------------|---|
| Basis for Limitations: | Water Quality Model: | CBOD ₅ , NH ₃ -N, DO, TKN, TP |
| | Reissuance with no modification: | pH, DO, CBOD ₅ , NH ₃ -N, TSS |
| | Instream calculation at 7Q10: | 7.0 % (CORMIX Model) |
| | Toxicity based: | TRC |
| | Secondary Treatment Levels: | TSS, TSS % Removals |
| | Other (described below): | E. coli, Chronic Toxicity |

Design Flow in Million Gallons per Day: 11.32 MGD

Description of Discharge: Outfall Number 0011; Effluent discharge to Coosa River, which is classified as F&W.

Outfall Number 002S; Stormwater discharge to Big Wills Creek, which is classified as F&W.

Discussion:

This permit is a reissuance due to expiration. The discharge limits for Total Ammonia – Nitrogen (NH₃-N), five-day Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Kjeldahl Nitrogen (TKN), and Dissolved Oxygen (D.O.) were developed by the Municipal Section based on a WLA (Waste Load Allocation) prepared by ADEM's Water Quality Branch on April 6, 2011. The monthly average limits are as follows: CBOD₅ = 20.0 mg/L, NH₃-N = 20.0 mg/L and TKN = 30 mg/L. A minimum daily limit of 3.0 mg/L is set for D.O.

This discharge is included as a point source in the Coosa Lakes TMDL, which was approved by EPA in October 2008. The TMDL states that major dischargers must attain a growing season (April – October) Total Phosphorus (TP) limit of 1.0 mg/L. The Permittee will be required to achieve compliance with this TP limit in accordance with the compliance schedule provided in the permit. The initial TP limit of 2.7 mg/L is based on the 90th percentile of the current growing season monthly average discharge concentrations (see attached). Based on the compliance schedule provided by the Permittee and the Department's Best Professional Judgment, the permit requires compliance with a monthly average TP

limit of 1.75 mg/L by January 1, 2014. The Department is imposing a final TMDL (TP limit of 1.0 mg/L) compliance date of March 1, 2015.

A TMDL for pH has been developed for the Neely Henry Lake; therefore, the minimum pH limit of 6.0 S.U. and a maximum limit of 8.5 S.U. will be imposed. The monthly average and daily maximum Total Residual Chlorine (TRC) limits of 0.775 mg/L and 1.0 mg/L, respectively, are based on EPA's recommended water quality values and on the current Toxicity Rationale, which considers the available dilution in the receiving stream.

The Department recently amended ADEM Administrative Code R.335-6-10-.09 to change the bacterial indicator organisms and associated criteria for non-coastal waters from fecal coliform to *Escherichia coli* (*E. coli*) to be consistent with the United States Environmental Protection Agency (EPA) recommendations for protection against water-borne illnesses. As a result, this permit includes *E. coli* limits that are consistent with the revised regulations.

The imposed *E. coli* limits were determined based on the water-use classification of the receiving stream. Since the Coosa River is classified as Fish & Wildlife, the limits for June – September are 126 col/100mL (monthly average) and 487 col/100mL (daily maximum), while the limits for October – May are 548 col/100mL (monthly average) and 2507 col/100mL (daily maximum).

This permit imposes year-round monthly monitoring for Nitrate plus Nitrite-Nitrogen ($\text{NO}_2 + \text{NO}_3\text{-N}$). Monitoring for this nutrient-related parameter is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose nutrient limits on this discharge.

The TSS and TSS percent removal limits of 30 mg/L and 85 % are based on the requirements of 40CFR 133.102 regarding Secondary Treatment. A CBOD₅ percent removal limit will not be imposed in this permit re-issuance because the imposed CBOD₅ limits are significantly more stringent than the conventional secondary limits.

Since this facility is classified as a Major Municipal Wastewater plant, the Department completed a reasonable potential analysis (RPA) of the discharge based on laboratory data provided in the Permittee's application. The RPA indicates whether pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream water quality standards. Based on the analytical data submitted by the Permittee, it does not appear that there is reasonable potential to cause in-stream water quality criteria exceedances at this time.

In the permit application, the Permittee reported one storm water outfall at the treatment plant. Outfall 002S will be directly related to stormwater monitoring. Stormwater monitoring will be required on an annual basis.

The frequency of monitoring for most parameters is two days per week. The frequency of monitoring for $\text{NO}_2 + \text{NO}_3\text{-N}$ and TP is once per month. Percent removal of TSS is to be reported monthly. Flow is to be monitored continuously, seven days per week.

Since this facility treats both municipal and industrial wastewater, toxicity testing will be required. Chronic toxicity testing is imposed with two species (Ceriodaphnia and Pimephales). Toxicity testing is required because this is a major facility discharging to a water of the state with a Fish and Wildlife water-use classification. Toxicity testing is imposed for both survival and life-cycle impairment (i.e., growth and reproduction). Chronic toxicity testing is required for the duration of this permit on an annual basis during the month of August at the calculated IWC of 7.0 percent. The IWC is based on the CORMIX

model completed in 2009. The IWC considers the combined flows of Gadsden West River WWTP, Rainbow City Lagoon, and Attalla Lagoon. If the toxicity tests of the effluent from Outfall 0011 indicate chronic toxicity, then toxicity tests may be required to be conducted during the months of February, May, August and November.

The Coosa River (Neely Henry Lake) is a Tier 1 stream and is listed on the 2010 303(d) list and does have a TMDL. The permit limits are consistent with the EPA-approved, October 2008, Coosa Lakes nutrients, pH, and organic enrichment TMDL.

ADEM Administrative Rule 335-6-10-.12 requires applicants to new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is not for a new or expanded discharge to a Tier II waterbody, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

Revision – March 22, 2012:

The monthly average TSS limit is based on 40 CFR part 133.102 regarding Secondary Treatment; however, the TSS limit has been lowered from 30.0 mg/L (secondary treatment) to 24.0 mg/L. Since the imposed TSS limit is significantly more stringent than the conventional secondary limit, it is appropriate to remove the TSS percent removal.

Prepared by: Nicholas Caraway

Gadsden West River WWTP (AL0053201)

Phosphorus data - 90th Percentile Calculation (growing season only)

| Month | Total Phosphorus (mg/L) |
|----------------|--------------------------------|
| April 2007 | 2 |
| May 2007 | 1.55 |
| June 2007 | 1.75 |
| July 2007 | 2.2 |
| August 2007 | 2.16 |
| September 2007 | 2.33 |
| October 2007 | 2.2 |
| April 2008 | 1.85 |
| May 2008 | 1.43 |
| June 2008 | 2.03 |
| July 2008 | 2.58 |
| August 2008 | 2.8 |
| September 2008 | 2.4 |
| October 2008 | 2.6 |
| April 2009 | 1.1 |
| May 2009 | 0.63 |
| July 2009 | 2.05 |
| August 2009 | 1.1 |
| September 2009 | 2.18 |
| October 2009 | 1.95 |
| April 2010 | 1.9 |
| May 2010 | 1.65 |
| June 2010 | 2.7 |
| July 2010 | 2.73 |
| August 2010 | 2.63 |
| September 2010 | 2.48 |
| October 2010 | 2.9 |
| April 2011 | 0.83 |
| May 2011 | 1.83 |
| June 2011 | 3.08 |
| July 2011 | 1.63 |

| | |
|------------------------|------------|
| 90th Percentile | 2.7 |
|------------------------|------------|

$$\psi_{\alpha}^{\beta} = \psi_{\alpha}^{\beta} + \epsilon^{\gamma} \psi_{\alpha}^{\beta\gamma} + \frac{1}{2} \epsilon^{\gamma} \epsilon^{\delta} \psi_{\alpha}^{\beta\gamma\delta}$$

22. **Useful Features**

[illegible]

TOXICITY AND DISINFECTION RATIONALE

| | | |
|--|--------------------------------|--|
| Facility Name: | Gadsden West River WWTP | |
| NPDES Permit Number: | AL0053201 | |
| Receiving Stream: | Coosa River (Neely Henry Lake) | |
| Facility Design Flow (Q _w): | 11.320 MGD | |
| Receiving Stream 7Q ₁₀ : | 1216.000 cfs | |
| Receiving Stream 1Q ₁₀ : | 912.000 cfs | |
| Winter Headwater Flow (WHF): | N/A. | |
| Summer Temperature for CCC: | 30 deg. Celsius | |
| Winter Temperature for CCC: | 20 deg. Celsius | |
| Headwater Background NH ₃ -N Level: | 0.11 mg/l | |
| Receiving Stream pH: | 7.0 s.u. | |
| Headwater Background FC Level (summer): | N/A. | (Only applicable for facilities with diffusers.) |
| (winter): | N/A. | |

The Stream Dilution Ratio (SDR) is calculated using the 7Q₁₀ for all stream classifications.

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 1.42\%$$

AMMONIA TOXICITY LIMITATIONS

Toxicity-based ammonia limits are calculated in accordance with the *Ammonia Toxicity Protocol* and the *General Guidance for Writing Water Quality Based Toxicity Permits*.

If the Limiting Dilution is less than 1%, the waterbody is considered stream-dominated and the CMC applies.

If the Limiting Dilution is greater than 1%, the waterbody is considered effluent-dominated and the CCC applies.

$$\begin{aligned} \text{Limiting Dilution} &= \frac{Q_w}{7Q_{10} + Q_w} \\ &= 1.42\% \quad \text{Effluent-Dominated, CCC Applies} \end{aligned}$$

$$\begin{aligned} \text{Criterion Maximum Concentration (CMC):} & \quad \text{CMC} = 0.411 / (1 + 10^{(7.204 - \text{pH})}) + 58.4 / (1 + 10^{(\text{pH} - 7.204)}) \\ \text{Criterion Continuous Concentration (CCC):} & \quad \text{CCC} = [0.0577 / (1 + 10^{(7.688 - \text{pH})}) + 2.487 / (1 + 10^{(\text{pH} - 7.688)})] \cdot \text{Min}[2.85, 1.45 \cdot 10^{(0.028 \cdot (25 - T))}] \end{aligned}$$

| | <u>CMC</u> | <u>CCC</u> |
|---|------------|------------|
| Allowable Summer Instream NH ₃ -N: | 36.09 mg/l | 2.18 mg/l |
| Allowable Winter Instream NH ₃ -N: | 36.09 mg/l | 4.15 mg/l |

$$\begin{aligned} \text{Summer NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) \cdot (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) \cdot (7Q_{10})]}{Q_w} \\ &= 145.8 \text{ mg/l NH}_3\text{-N at 7Q}_{10} \end{aligned}$$

$$\begin{aligned} \text{Winter NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) \cdot (\text{WHF} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) \cdot (\text{WHF})]}{Q_w} \\ &= \text{N/A.} \end{aligned}$$

The ammonia limits established in the permit will be the lesser of the DO-based ammonia limit (from the wasteload allocation model) or the toxicity limits calculated above.

| | <u>DO-based NH₃-N limit</u> | <u>Toxicity-based NH₃-N limit</u> |
|--------|--|--|
| Summer | 20.00 mg/l NH ₃ -N | 145.80 mg/l NH ₃ -N |
| Winter | N/A. | N/A. |

Summer: The DO based limit of 20.00 mg/l NH₃-N applies.

Winter limits are not applicable.

TOXICITY TESTING REQUIREMENTS (REFERENCE: MUNICIPAL BRANCH TOXICITY PERMITTING STRATEGY)

The following factors trigger toxicity testing requirements:

1. Facility design flow is equal to or greater than 1.0 MGD (major facility).
2. There are significant industrial contributors (SID permits).

Acute toxicity testing is specified for A&I receiving streams, or for stream dilution ratios of 1% or less.

Chronic toxicity testing is specified for all other situations requiring toxicity testing.

Chronic toxicity testing is required

$$\text{Instream Waste Concentration (IWC)} = \frac{Q_w}{7Q_{10} + Q_w} = 1.42\% \quad \text{Note: This number will be rounded up for toxicity testing purposes.}$$

DISINFECTION REQUIREMENTS

Bacteria limits are required, and will be the water quality limit for the receiving stream, except where diffusers are used the limit may be adjusted for the dilution provided by the diffuser.

See the attached Disinfection Guidance for applicable stream standards.

(Non-coastal limits apply)

Applicable Stream Classification: **Fish & Wildlife**

Disinfection Type: **Chlorination**

Limit calculation method: **Limits based on meeting stream standards at the point of discharge.**

| | Stream Standard (colonies/100ml) | Effluent Limit (colonies/100ml) |
|---|-------------------------------------|------------------------------------|
| <u>E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)</u> | | |
| Monthly limit as monthly average (October through May): | 548 | 548 |
| Monthly limit as monthly average (June through September): | 126 | 126 |
| Daily Max (October through May): | 2507 | 2507 |
| Daily Max (June through September): | 487 | 487 |
| <u>Enterococci (applies to Coastal)</u> | | |
| Monthly limit as geometric mean (October through May): | Not applicable | Not applicable |
| Monthly limit as geometric mean (June through September): | Not applicable | Not applicable |
| Daily Max (October through May): | Not applicable | Not applicable |
| Daily Max (June through September): | Not applicable | Not applicable |

MAXIMUM ALLOWABLE CHLORINATION LIMITS

Toxicity-based chlorine limits are calculated in accordance with the General Guidance for Writing Water Quality Based Toxicity Permits.

Chlorine has been shown to be acutely toxic at 0.019 mg/l and chronically toxic at 0.011 mg/l.

| | | |
|------------------------------------|----------------------|---------------|
| Maximum allowable TRC in effluent: | 0.775 mg/l (chronic) | (0.011)/(SDR) |
| Maximum allowable TRC in effluent: | 1.338 mg/l (acute) | (0.019)/(SDR) |

NOTE: A maximum chlorine limit will be imposed such that the instream concentration will not exceed acutely toxic concentrations in A & I streams and chronically toxic concentrations in all other streams, but may not exceed 1.0 mg/l.

Prepared By:

Nicholas Caraway

Date:

5/26/2011

FACT SHEET
APPLICATION FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE TREATED WASTEWATERS
TO WATERS OF THE STATE OF ALABAMA

Date: April 5, 2011

Prepared By: Nicholas Caraway

NPDES Permit No. AL0053201

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant and Location if Different From Mailing Address

Applicant Name and Address:

Water Works and Sewer Board of the City of Gadsden
Post Office Box 800
Gadsden, AL 35901

Facility Location:

Gadsden West River WWTP
2000 Wills Creek Rd
Gadsden, Alabama 35902

b. Description of Applicant's Facility or Activity Generating the Discharge

Municipal Wastewater Treatment Plant

For the Outfall latitude and longitude see the permit application

c. Applicant's Receiving Waters

Receiving Waters

Coosa River (Neely Henry Lake)
Big Wills Creek (Stormwater)

Classification

Fish and Wildlife
Fish and Wildlife

d. Quantitative Description of Proposed Discharges

See attached draft permit and permit application

2. PROPOSED DISCHARGE LIMITATIONS

See attached draft permit

3. STATEMENT OF BASIS FOR PERMIT LIMITATIONS

See attached permit rationale

4. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Alabama Department of Environmental Management proposes to issue an NPDES permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Interested persons are invited to submit written comments on the permit application or on proposed determinations to the following address:

Russell A. Kelly, Chief
Permits and Services Division
Alabama Department of Environmental Management
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059
(334) 271-7714

All comments received prior to the closure of the public notice period (see attached public notice) will be considered in the formulation of final determinations with regard to this application.

b. Public Hearing

A written request for a public hearing may also be filed with the public notice period and must state the nature of the issues proposed to be raised in the hearing. The Director shall hold a public hearing whenever it is found, on the basis of hearing requests, that there exists a significant degree of public interest in the permit application or draft permit or group of permits. A request for a hearing should be filed with the Department at the following address:

Russell A. Kelly, Chief
Permits and Services Division
Alabama Department of Environmental Management
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059
(334) 271-7714

The Director may hold a public hearing if he determines that useful information and data may be obtained thereby. Public notice of such a hearing will be published at least 30 days prior to the hearing in a newspaper having general circulation in the geographical area of the discharge and will be sent to those on the ADEM mailing list at least thirty days prior to the hearing.

c. Issuance of the Permit

Upon the expiration of the comment period and, if applicable, completion of the public hearing process a response to all significant comments will be prepared. After consideration of all comments received during the notice period or as the result of a public hearing, the response to comments, and of the requirements of the Alabama Water Pollution Control Act and appropriate regulations, the Director will make a final decision regarding permit issuance. **The permit record, including the response to comments, will be available to the public and an appointment to review the record may be made by writing the Permits and Services Division at the above address.**

Unless a request for a stay of a permit or permit provision is granted, the proposed permit contained in the Director's determination shall be issued and effective; and will be the final action of the Alabama Department of Environmental Management.

d. Appeal Procedures

Any person adversely affected by the Director's final decision may submit an appeal or a request for a stay of the permit or one or more provisions of the permit. Such requests should be received by the

Environmental Management Commission within thirty days of issuance of the permit. Requests should be submitted to the Chairperson at the following address:

Alabama Environmental Management Commission
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059

All requests must:

- (i) State the name, mailing address and telephone number of the person making such request;
- (ii) Identify the interest of the appellant which is affected by the proposed issuance, denial or modification of the permit contained in the determination of the Director, and explain how and to what extent that interest would be directly and adversely affected by such determination;
- (iii) Identify any persons whom the request represents;
- (iv) State with particularity the issues proposed to be considered at the hearing;
- (v) Include any terms and conditions with which the appellant proposes to revise or replace the determinations of the Director;
- (vi) State the name, mailing address and telephone number of the attorney for the person making the request, if represented by an attorney; and
- (vii) An original signature of the person making the request or such person's attorney.

The Commission may rule on the appeal or may hold an appeals hearing prior to making a ruling.

Compliance Schedule with Total Phosphorus Limit East Plant - Gadsden Water and Sewer Board

| Date | Month of Permit | Task |
|-------------|------------------------|---|
| 7/1/2010 | 1 | 2010 Permit Takes Effect |
| 9/1/2010 | 2 | Complete Lab Studies |
| | | Commence Design of Phase I Improvement |
| 9/1/2010 | 2 | (Screening, Grit Removal, Upgrade/Replace Equipment) |
| 12/1/2010 | 5 | Submit Annual Progress Report to ADEM |
| 1/6/2011 | 6 | Complete Design of Phase I |
| 2/21/2011 | 8 | Award of Phase I Contract |
| 4/4/2011 | 9 | Start of Phase I Construction |
| | | Start Phase II Design (Chemical Feeds, Sludge Handling, |
| 7/1/2011 | 12 | Disinfection, Upgrade/Replacement of Equipment) |
| 12/1/2011 | 17 | Submit Annual Progress Report to ADEM |
| 12/9/2011 | 17 | Completion of Phase I Contract |
| 2/1/2012 | 19 | Start of Optimization of Phase I Upgrade |
| 2/1/2012 | 19 | Completion of Phase II Design |
| 4/1/2012 | 21 | Award of Phase II Contract |
| 5/1/2012 | 22 | Start of Phase II Construction |
| 6/1/2012 | 23 | Completion of Optimization of Phase I Upgrade |
| 12/1/2012 | 29 | Submit Annual Progress Report to ADEM |
| 5/1/2013 | 34 | Completion of Phase II Contract |
| | | Start of Operational Studies of Clarification & |
| 6/1/2013 | 35 | Filtration Equipment |
| 9/1/2013 | 38 | Start of Optimization of Phase II Upgrade |
| 12/1/2013 | 41 | Submit Annual Progress Report to ADEM |
| | | Achieve Compliance with TP limit of 1.75 mg/L |
| 1/1/2014 | 42 | (Growing Season Monthly Avg.) |
| 3/1/2014 | 44 | Completion of Optimization of Phase II Upgrade |
| 12/1/2014 | 53 | Submit Annual Progress Report to ADEM |
| | | Achieve Compliance with TP limit of 1.0 mg/L |
| 3/1/2015 | 56 | (Growing Season Monthly Avg.) |

Waste Load Allocation Summary

Comments included

☒ Yes ☐ No

General Information

Information
Verified By

dwt

Page 1

Receiving Stream Name Coosa River (Neely Henry Lake)

Year File Was Created 2011

Previous File Name

OR: Local Name (If applicable)

Facility Name

Gadsden West River WWTP

Previous Discharger Name

Gadsden West WWTP

Or-AKA (includes previous file name)

11 Digit HUC Code 03150106030

12 Digit HUC Code 031501060309

River Basin Coosa

County Etowah

Use Classification F&W

Date of WLA Response 4/6/2011

Discharge Latitude 33.98232

Lat/Long Method GPS

Discharge Longitude -85.99922

Site Visit Completed? ☒ Yes ☐ No

Approved TMDL?

☒ Yes ☐ No

Date of Site Visit 3/30/2011

Waterbody Impaired? ☒ Yes ☐ No

Approval Date of TMDL 10/28/2008

Antidegradation ☐ Yes ☒ No

Permit Information

Waterbody Tier Level Tier I

Permit Number AL0053201

Use Support Category 4A

Permit Status Active

Other Point Sources? ☒ Yes ☐ No

Sources Included in Model

SOUTHSIDE LAGOON
Glencoe Lagoon
GADSDEN East River WWTP
RAINBOW CITY LAGOON
ATTALLA LAGOON
Knoch/Tyson_foods
Willow Point Marina

Type of Discharger

- ☒ Municipal
☐ Industrial
☐ Semipublic/Private
☐ Mining

Waste Load Allocation Information

Modeled Reach Length 77.6

Miles

Date of Allocation 10/28/2008

Name of Model Used WASP

Allocation Type Annual

Model Completed by DWT/TT

Type of Model Used Calibrated / Verified

Allocation Developed by Water Quality Branch

Mixing Zone Analysis Summary

Comments included

☒ Yes ☐ No

General Information

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Year File Was Started 2008

Information
Verified By

Date of MZ Response 8/25/2009

Name of Receiving Stream Neely Henry Lake

Previous file name: Or-AKA (If applicable)

Facility Name Rainbow City Lagoon

Previous Name of Discharger Or-AKA (If applicable)

11 Digit HUC Code USGS 03150106030

Other Point Sources? ☒ Yes ☐ No

12 Digit HUC Code 031501060309

Sources Included in the Model:

River Basin Coosa

Gadsden West WWTP
Attalla Lagoon

County Etowah

Use Classification F&W

Permit Information

Discharge Latitude 33.97728

Print Record

Discharge Longitude -85.99708

Site Visit Completed? ☐ Yes ☒ No

Close Form

Date of Site Visit

Type of Discharger

☒ Municipal
☐ Industrial
☐ Semipublic/Private

Permit Number AL0056839

Permit Status Active

Hydrology

Drainage Area 6104 sq mi

Stream 7Q10 1216 cfs

Stream 1Q10 912 cfs

Stream 7Q2 cfs

Method Used to Calculate

ADEM Estimate w/USGS Gage Data

75% of 7Q10

Date of MZ Analysis 8/25/2009

Model Completed by David Thompson

Discharge Design Flow 18.32 MGD

Seasonal? ☐ Yes ☒ No

If not seasonal, only the summer
sections will be used

Pollutant Category

Whole Effluent Toxicity (WET) ☒ Thermal ☐ Pathogens ☐